



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/533,397

04/26/2005

Eiji Oki

5259-052/NP

1591

27572 7590 04/15/2008
HARNESS, DICKEY & PIERCE, P.L.C.
P.O. BOX 828
BLOOMFIELD HILLS, MI 48303

EXAMINER

PHAM, TITO Q

ART UNIT

PAPER NUMBER

2619

MAIL DATE

DELIVERY MODE

04/15/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/533,397	Applicant(s) OKI ET AL.	
	Examiner TITO PHAM	Art Unit 2619	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on April 26, 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6, 20-25, 28, 42 and 43 is/are rejected.
- 7) ☒ Claim(s) 4, 5, 7-19, 26, 27, 29-41 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 April 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>04/26/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. Figures 21-27 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities: missing word. On page 3 line 14, the letter "B" is missing in front of "Figure 22."

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 43 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

On lines 5-7, claim 43 recites "an IP/MPLS node... which *advertises* link state information of the GMPLS... to *the IP/MPLS node* by a router LSA as a normal link in the IP/MPLS node, and which *hold* link state information..." The claim of an IP/MPLS node advertises to itself link state information and holds on to that information contradicts with the disclosure. Therefore, it renders the claim indefinite.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Fant et al. (US Pub. 2004/0076151 A1) hereinafter Fant.

- Regarding claims 1 and 22, Fant discloses A GMPLS+IP/MPLS node which is used in a network in which a GMPLS (Generalized Multi Protocol Label Switching) network (Figure 1) and an IP (Internet Protocol) network (inherent as the client connected to GMPLS is a WAN as described in paragraph 19 lines 11-16) are mixed, the GMPLS network comprising a node having a GMPLS function (figure 1 item 5), the IP network comprising an IP/MPLS (Internet Protocol/Multi Protocol Label Switching) node (figure 1, Client Data Source, paragraph 19 lines 11-16), and which constitutes the GMPLS

network (figure 1), and which processes a GMPLS protocol (figure 1) and an IP/MPLS protocol (Client Data card), the GMPLS+IP/MPLS node comprising:

a device (figure 1 item 15) which establishes a GMPLS label path (paragraph 25 lines 1-2) of a packet layer (paragraph 25 lines 12-13) with another GMPLS+IP/MPLS node (figure 1 item 9) in the GMPLS network.

a device (figure 1 item 11) which tunnel transfers a packet transferred from the IP/MPLS node (Client Source) with the other GMPLS+IP/MPLS node (figure 1 item 9) through the GMPLS label path (paragraph 25 lines 12-14, the frame encapsulates the packet).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2, 3, 6, 23-25, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fant et al. (US Pub. 2004/0076151 A1) hereinafter Fant, in view of Barrett et al. (US Pub. 2004/0015583 A1) hereinafter Barrett.

- Regarding claims 2 and 23, Fant discloses all limitations of claims 1 and 22 above. Fant does not teach a device which advertises link state information of the GMPLS label path of the packet layer to the IP/MPLS node by a router LSA (Label Switching Advertisement) as a normal link in the IP/MPLS node. However,

Barrett disclose a device (figure 13 item 301) which advertises link state information of the GMPLS label path (paragraph 101 lines 7-12) of the packet layer to the IP/MPLS node (other router running OSPF, as it is well known in the art that IP/MPLS router runs OSPF routing protocol) by a router LSA (Label Switching Advertisement) (figure 13 item 1301) as a normal link in the IP/MPLS node (router running OSPF). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to have the GMPLS node sharing network topology and resource availability with its peer(s) running OSPF for the purpose of "calculations such as deriving the shortest path to all destination in the network to populate its routing table and forward packet." (paragraph 97 lines 7-10).

- Claim 24 is rejected similar to claim 23 above. Opaque LSA is just another type of LSA for application-specific purposes.
- Regarding claims 3 and 25, all limitations are disclosed in claims 2 and 23 above. Barrett further teach a device which holds the link state information having the GMPLS label path of the packet layer advertised as the link (figure 13 item 405, paragraph 101 lines 12-14); and a device which holds link state information inside of the GMPLS network (figure 13 item 1301, paragraph 97 lines 1-7, paragraph 102 lines 1-2).
- Regarding claims 6 and 28, all limitations are disclosed in claim 2 above. They do not teach a device which advertises the GMPLS label switch path of the packet layer as a link of a numbered system. However, under the official notice,

the link advertisement under GMPLS includes various link numbering types which could be either numbered or unnumbered. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention for the GMPLS node to advertise the GMPLS label switch path as a link of a numbered system to its surrounding OSPF nodes for the purpose of identifying the link ID by its IP address.

9. Claims 20, 21, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fant et al. (US Pub. 2004/0076151 A1) hereinafter Fant in view of Doukai (US Pub. 2004/0114595 A1) and in view of Barrett et al. (US Pub. 2004/0015583 A1), hereinafter Barrett.

- Regarding claims 20 and 42, Fant discloses an IP/MPLS node (Client Data Source) which is used in a network in which a GMPLS network (figure 1) and an IP network (Client Data is WAN) are mixed, the GMPLS comprising a node (figure 1 item 7) having a GMPLS function, and a GMPLS+IP/MPLS (figure 1 item 5) node which constitutes the GMPLS network and which is capable of processing a GMPLS protocol (inherent) and an IP/MPLS protocol (WAN, paragraph 19 lines 9-16) establishes a GMPLS label path (paragraph 25 lines 1-2) of a packet layer with another GMPLS+IP/MPLS nodes (paragraph 24 lines 3-6) in the GMPLS network. Fant does not teach the IP/MPLS node comprising a device which holds link state information having a GMPLS label path of the packet layer advertised as a link. However, Doukai discloses a MPLS node having a device which holds link state information (figure 27 item 36-1, paragraph

Art Unit: 2619

241 lines 1-3), and Barrett discloses the GMPLS node advertises to its peer(s) the GMPLS link state information (paragraph 101 lines 7-12). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention for the IP/MPLS node to have the link state database holding link state information for the purpose of knowing the network topology/information in order to calculate a packet routing path.

- Claim 21 is rejected similarly to claim 20 rejection above.

Allowable Subject Matter

10. Claims 4, 5, 7-19, 26, 27, 29-41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TITO PHAM whose telephone number is (571)272-4122. The examiner can normally be reached on Monday-Friday 8AM-5PM EST Alt Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 571-272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TP

Application/Control Number: 10/533,397
Art Unit: 2619

Page 8

/CHAU T. NGUYEN/
Supervisory Patent Examiner, Art Unit 2619